



SEQUENCE LISTING

<110> BRADY, Hugh Redmond et al.

<120> Identification of genes having a role in the presentation of diabetic nephropathy

<130> 1377-0170P

<140> US 09/914,191

<141> 2001-08-24

<150> 990157

<151> 1999-02-26

<160> 33

<170> PatentIn Ver. 2.1

<210> 1

<211> 598

<212> DNA

<213> Homo sapiens

<220>

<221> Unsure

<222> (1)..(598)

<223> any n =a,c,g,t any unknown or other

<400> 1

ttggaatagt tcttgcttta taaaaatagt actgcgatta aaaaaaaaagc acttctgcc 60
aaggaaccat gttccaaacac cgccaaacaag gtgttctgtct taaacagagt aagatacacc 120
accccccattcc atcccttcct tccctgttcc cctcccaact tgagttgtgt cattcgcacc 180
agtgtcctgg gtggtaggga tgctacagcc acctaaggca aggagccctg ggaggtggga 240
gggcttgcatt ggttaagcac accagaactg aagcgcaaaa gggtcagctg tcttcatcta 300
gaatctctgg atgttccttc cagaaagcat ccccgatgat atcgcagtgc aagggcactg 360
gctttgtcct ggtccgggtc actgccatct tttttccttc catttctgtt ggcagctaa 420
tttcttttgtt catcacttca tccacatttctt gccatatcaa cacagtccct ttcctataca 480
tcggcagctc attattatag ttgatgttga attcagaaaa caaaatctca ttcttgtctg 540
ctgnaagagt tccctgttaat ctcccttggg cttgtactgg tgtagtccca gattgttg 598

<210> 2

<211> 761

<212> DNA

<213> Homo sapiens

<220>

<221> Unsure

<222> (1)..(761)

<223> any n =a,c,g,t any unknown or other

<400> 2

ggtcctttaa agtctggttg ctgggataca ccacgactct tccggtaaa gcctggggga 60
tacagaaggg gctrgtccctc aaagtaatcc cgccaataaa acayatagct ggaggcaaacc 120
tgggaggyca cgtgagtcat gaactttact ggctttctt ttaaaccat tggtttccg 180
cttgwacaca aagctgtact catcactctg tccataacgc gatcacaata tcctctagtt 240

cttccatcac agtctgcgca catttggta tcagctggag agcacggctg tcattgggtt 300
 ttgcaaagtt gtgcttctca gcaaaccgat ggaaattccg gccgtccagc cgnactacca 360
 cccagcagtg tgccaggcag gtgtcgtcag cctcaagtc cctcacgtac tcgaacttgc 420
 ttttgcctat ggtcgcccc aatctcaggt accgtctcag agtgcgtggaa atggtggcca 480
 aggaatcgtg aaccttaact ttacaggcgc cccacattct acacgcggaa aggaaaggc 540
 cagatagccc cgccccggaa gtgttctctt cgtggctact ctagccgtag ggcgtcata 600
 gtctctctcg sctctccctg kagttcttaa mcyccaggaa aaraggatg gaggtttagg 660
 ttcctccgtt agcacccccc acgcttgcctt cttccctc cccgtctgcg gcaaatcgt 720
 ctcacgaggt ttttaaaaat tatttttat ctgctggct t 761

<210> 3
 <211> 393
 <212> DNA
 <213> Homo sapiens

<220>
 <221> Unsure
 <222> (1)..(393)
 <223> any n =a,c,g,t any unknown or other

<400> 3
 atgacacaaa tattaggatt ttatTTTAC tattatccac cagcaacaag atatcaaaca 60
 ctggttctgt gattatttaa tggtaaaaaa gttgaataaa tcaatttagt ataccatata 120
 gttggatata ttagtcatt ttTCTTTAA aaatcacact ttggataata tgatgatact 180
 ggcaaatgct caagctgagt ggaaaaataat ataaacattg tataggcgaat taattccaaat 240
 cttgtgcatt ccctgtgtaa acctacatac acaaaaagaa aaaagactga aaggaaccat 300
 ccacaatgct ttgatcgaaa aagacggaga aacaaggatgt taattttctt aactatagtt 360
 ttnggtgtat tccagattttt ctacaagttt ata 393

<210> 4
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 4
 gtactttgga tttggtaaac ctgtttctt caagcctgag gttttatata caaactccct 60
 gaataactctt tttgccttgc atcttctcag cctccttagcc aagtccatgt taatatggaa 120
 aacaaacact gcagacttga gattcagttt ccgatcaagg ctctggcatt cagagaaccc 180
 ttgcaactcg agaagctgtt ttatTTCTG ttttggggat atccagtgt ctccatcta 240
 acaactaaac aggagccatt tcaaggcggg agatattta aacacccaaa atggggatgt 300
 ctgattttca aactttaaa attcactact gatgattctg cactgtatga cccacccca aatcttgc 360
 ccaaacacat aagtgtgtgt gtttgcata cactgtatga cccacccca aatcttgc 420
 ttgtccacat tctcc 435

<210> 5
 <211> 273
 <212> DNA
 <213> Homo sapiens

<220>
 <221> Unsure
 <222> (1)..(273)
 <223> any n =a,c,g,t any unknown or other

<400> 5
agaagcaatt taggaancn acagnaaana aatgctgttt tataggagag aaaacacggc 60
acaccaaggt taagtagttt gtagacgatg ttgaataggt tcaggtacag gtcaatgcag 120
tcatgagggaa agcacctang tatacttgac agatagtcgg ctttgcttaa cacccaaactc 180
ctccaccctg tgcatgtttnn cttgtgccag tgatcacagg attcgctgag tgaattacca 240
taattggatt taattcacga agggatgtt ttc 273

<210> 6
<211> 309
<212> DNA
<213> *Homo sapiens*

```
<400> 6
attgatagag gccctgttcc atgacatttc atgagttca atatgttgg cagcatgtt 60
tgaggtgact ctcagccccct ttcccactga gatggactgt ggtgtatgtc tgagggtgtg 120
actgacacac cttcatgtgc ccaagcatgg gtttgcacatc aggtcacatg cagtttttgg 180
catagtaaat gtatcattgt tcttttcctc cctcctaaag gaaacagagg aatccacccgt 240
tatgagagtg ccatgttaggg ataaacttaa aggacagatg acacatttgtt catgttcgtg 300
ataaggaaa 309
```

```
<210> 7
<211> 20
<212> DNA
<213> Homo sapiens
```

<400> 7
accacacaqtcc atqccatcac 20

```
<210> 8
<211> 20
<212> DNA
<213> Homo sapiens
```

<400> 8
tccaccaccc ttttqctata 20

<210> 9
<211> 20
<212> DNA
<213> Homo sapiens

<400> 9
gatcttcctt gcttaaaggg 20

<210> 10
<211> 20
<212> DNA
<213> *Homo sapiens*

<400> 10
actggatcaggc ccttgtagaagg 20

<210> 11
<211> 20
<212> DNA
<213> Homo sapiens

<400> 11
ccaggagttc caggattca

20

<210> 12
<211> 20
<212> DNA
<213> Homo sapiens

<400> 12
tttggtccc agaaggacac

20

<210> 13
<211> 18
<212> DNA
<213> Homo sapiens

<400> 13
cgaaaatcaca gccagtag

18

<210> 14
<211> 18
<212> DNA
<213> Homo sapiens

<400> 14
atcacatcca cacggtag

18

<210> 15
<211> 20
<212> DNA
<213> Homo sapiens

<400> 15
ctaagacctg tggaatgggc

20

<210> 16
<211> 21
<212> DNA
<213> Homo sapiens

<400> 16
ctcaaagatg tcattgtccc c

21

<210> 17
<211> 20

<212> DNA
<213> Homo sapiens

<400> 17
atgagccgca cagcctacac

20

<210> 18
<211> 23
<212> DNA
<213> Homo sapiens

<400> 18
ttaatccaaa tcgatggata tgc

23

<210> 19
<211> 21
<212> DNA
<213> Homo sapiens

<400> 19
ctcagcctcc tagccaagtc c

21

<210> 20
<211> 21
<212> DNA
<213> Homo sapiens

<400> 20
gtattgtcca cattctccaa c

21

<210> 21
<211> 20
<212> DNA
<213> Homo sapiens

<400> 21
atgagccgca cagcctacac

20

<210> 22
<211> 21
<212> DNA
<213> Homo sapiens

<400> 22
gtattgtcca cattctccaa c

21

<210> 23
<211> 20
<212> DNA
<213> Homo sapiens

<400> 23	
gagagtaca cgtgtgaagc	20
<210> 24	
<211> 19	
<212> DNA	
<213> Homo sapiens	
<400> 24	
aggaggatgc aagcacagg	19
<210> 25	
<211> 29	
<212> DNA	
<213> Homo sapiens	
<400> 25	
cgcggatcct gcttcttaga cggactgcg	29
<210> 26	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 26	
tttgctgtac tagcgacacc	20
<210> 27	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 27	
caagatgaac acagctgg	18
<210> 28	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 28	
gctcaggata ctcaagac	18
<210> 29	
<211> 341	
<212> DNA	
<213> Rattus sp.	
<400> 29	
atctccaccc gggttaccaa tgacaatact ttctgcaggc tggagaagca gagtcgtctc	60
tgcattgtca ggccctgtga agctgaccta gagaaaaaca ttaagaaggg caaaaagtgc	120

atccggacgc ctaaaattgc caaggctgtc aagtttgc 180
 aagacctacc gggctaagtt ctgtgggtg tgcacggacg gcccgtgctg cacaccgcac 240
 agaaccacca cactgcgggt gtagttcaag tgcccccatt gcgaaatcat gaaaaagaac 300
 atgatgttca tcaagacctg tgccctgcat tacaactgtc c 341

<210> 30
 <211> 341
 <212> DNA
 <213> Mus sp.

<400> 30
 atctccaccc gagttaccaa tgacaataacc ttctgcagac tggagaagca gagccgcctc 60
 tgcattgtca ggccctgcga agctgacctg gaggaaaaaca ttaagaaggg caaaaagtgc 120
 atccggacac ctaaaatcgc caaggctgtc aagtttgc 180
 aagacatata gggctaagtt ctgcgggtg tgcacagacg gcccgtgctg cacaccgcac 240
 agaaccacca ctctgcagggt gtagttcaaa tgcccccatt gcgagatcat gaaaaagaat 300
 atgatgttca tcaagacctg tgccctgcat tacaactgtc c 341

<210> 31
 <211> 113
 <212> PRT
 <213> Rattus sp.

<400> 31
 Ile Ser Thr Arg Val Thr Asn Asp Asn Thr Phe Cys Arg Leu Glu Lys
 1 5 10 15
 Gln Ser Arg Leu Cys Met Val Arg Pro Cys Glu Ala Asp Leu Glu Glu
 20 25 30
 Asn Ile Lys Lys Gly Lys Cys Ile Arg Thr Pro Lys Ile Ala Lys
 35 40 45
 Pro Val Lys Phe Glu Leu Ser Gly Cys Thr Ser Val Lys Thr Tyr Arg
 50 55 60
 Ala Lys Phe Cys Gly Val Cys Thr Asp Gly Arg Cys Cys Thr Pro His
 65 70 75 80
 Arg Thr Thr Thr Leu Pro Val Glu Phe Lys Cys Pro His Gly Glu Ile
 85 90 95
 Met Lys Lys Asn Met Met Phe Ile Lys Thr Cys Ala Cys His Tyr Asn
 100 105 110
 Cys

<210> 32
 <211> 113
 <212> PRT
 <213> Mus sp.

<400> 32

Ile Ser Thr Arg Val Thr Asn Asp Asn Thr Phe Cys Arg Leu Glu Lys
 1 5 10 15

Gln Ser Arg Leu Cys Met Val Arg Pro Cys Glu Ala Asp Leu Glu Glu
 20 25 30

Asn Ile Lys Lys Gly Lys Cys Ile Arg Thr Pro Lys Ile Ala Lys
 35 40 45

Pro Val Lys Phe Glu Leu Ser Gly Cys Thr Ser Val Lys Thr Tyr Arg
 50 55 60

Ala Lys Phe Cys Gly Val Cys Thr Asp Gly Arg Cys Cys Thr Pro His
 65 70 75 80

Arg Thr Thr Thr Leu Pro Val Glu Phe Lys Cys Pro Asp Gly Glu Ile
 85 90 95

Met Lys Lys Asn Met Met Phe Ile Lys Thr Cys Ala Cys His Tyr Asn
 100 105 110

Cys

<210> 33

<211> 4049

<212> DNA

<213> Homo sapiens

<400> 33

gcggccgcac tcagcgcac gcgtcgaaaag cgcaaggcccc gaggacccgc cgcaactgaca 60
 gtatgagccg cacagcctac acgggtggag ccctgcttct cctttgggg accctgctgc 120
 cggctgtga agggaaaaag aaagggtccc aagggtccat ccccccgcga gacaaggccc 180
 agcacaatga ctcagagcag actcagtcgc cccagcagcc tggctccagg aaccggggc 240
 ggggccaagg gcggggcaact gccatgccc gggaggaggt gctggagttc agccaagagg 300
 ccctgcatgt gacggagcgc aaatacctga agcgagactg gtgcaaaaacc cagccgctta 360
 agcagaccat ccacgaggaa ggctgcaaca gtcgcaccat catcaaccgc ttctgttacg 420
 gccagtgcaa ctcttctac atccccaggc acatccggaa ggaggaaggt tcctttagt 480
 cctgctcctt ctgcaagccc aagaaattca ctaccatgat ggtcacactc aactgcccctg 540
 aactacagcc acctaccaag aagaagagag tcacacgtgt gaagcagtgt cgttgcata 600
 ccatcgattt ggattaagcc aaatccaggt gcaccaggca tgcctctaga atgcagcccc 660
 aggaagtccc agacctaaaa caaccagatt cttaactggc ttaaacctag aggcagaag 720
 aaccccccagc tgcctctgg caaggagcctg ctttgtcgta gttcgtgtc atgagtgtgg 780
 atgggtgcct gtgggtgtt ttagacacca gagaaaaacac agtctctgt agagagact 840
 ccctatttt taaacatatac tgcttaatg gggatgtacc agaaacccac ctcaccccg 900
 ctcacatcta aaggggcggg gcgtggctc gttctgact ttgtgtttt gtccctct 960
 ggggaccaga atctcccttc ggaatgaatg ttcatgaaag aggctcttct gagggcaaga 1020
 gacctgtttt agtgcgtcat tcgacatgga aaagtccctt taacctgtgc ttgcattctc 1080
 cttccctcct ctcctcaca attcatctct tcttaagttt atagtgacta tgtcagtcta 1140
 atctcttgc ttgccaagggtt cctaaattaa ttcaactaac catgatgcaa atgttttca 1200
 ttttgtaag accctccaga ctctggaga ggctgggtg ggcaaggaca agcaggatag 1260
 tggagtgaga aaggagggt ggagggtgag gccaaatcag gtccagcaaa agtcaagtgg 1320
 gacattgcag aagcttggaa gccaaatacc agaacacagg ctgatgctc tgagaaagtc 1380
 tttccttagt attaacaga acccaagtga acagaggaga aatgagattt ccagaaagt 1440
 attaactttt gccgttgcaa tctgctcaaa cctaacacca aactgaaaac ataaatactg 1500
 accactccta tgttcggacc caagcaagtt agctaaacca accaactcc tctgctttgt 1560

ccctcaggtg gaaaagagag gtagttaga actctctgca taggggtggg aattaatcaa 1620
 aaacckcaga ggctgaaatt cctaatacct ttccttatac gtggttatac tcagctcatt 1680
 tccattccac tatttccat aatgcttctg agagccacta acttgattga taaagatcct 1740
 gcctctgctg agtgtacctg acagtaagtc taaagatgar agagtttagg gactactctg 1800
 ttttagcaag aratattktg ggggtcttt tgtttaact attgtcagga gattgggcta 1860
 ragagaagac gacgagagta agaaaataaa gggrattgcc tctggctaga gagtaagtt 1920
 ggtgttaata cctggtagaa atgtaaggga tatgacctcc ctttctttat gtgctcactg 1980
 aggatctgag gggaccctgt taggagagca tagcatcatg atgttattagc tgttcatctg 2040
 ctactggttg gatggacata actattgtaa ctattcaga tttactggta ggcactgtcc 2100
 tctgattaaa cttggcctac tggcaatggc tacttaggat tgatctaagg gccaaagtgc 2160
 agggtgggtg aactttattg tactttggat ttggtaacc tgtttcttc aagcctgagg 2220
 ttttatatac aaactccctg aatactctt ttgccttgc tcttctcagc ctccctagcca 2280
 agtcctatgt aatatggaaa acaaacactg cagacttgag attcagttgc cgatcaaggc 2340
 tctggcattc agagaaccct tgcaactcga gaagctgtt ttatttcgtt tttgtttga 2400
 tccagtgtc tcccatctaa caactaaaca ggagccattt caaggcggga gatattttaa 2460
 acacccaaaa tgggggtct gatttcaaa cttttaact cactactgat gatttcacg 2520
 ctaggcgaat ttgtccaaac acatagtgtg tgggtttgtt atacactgta tgaccccacc 2580
 ccaaatctt gtattgtcca cattctccaa caataaagca cagagtggat ttaattaagc 2640
 acacaaatgc taaggcagaa ttttgggggt gggagagaag aaaaggggaaa gaagctgaaa 2700
 atgtaaaacc acaccaggga ggaaaaatga cattcagaac cagcaaacac tgaatttctc 2760
 ttgtgtttt aactctgcca caagaatgca atttcgttaa tggagatgac ttaagttggc 2820
 agcagtaatc ttcttttagg agcttgcattt acagcttgc acataagtgc agatttggt 2880
 caagtaaaga gaatttcctc aacactaact tcactggat aatcagcagc gtaactaccc 2940
 taaaagcata tcactagcca aagaggggaaa tatctgttct tcttactgtg cctatattaa 3000
 gactagtaca aatgtgggt gtcttccaac ttccattgaa aatgccatat ctataccata 3060
 ttttattcga gtcactgtatc atgtaatgtatc atatttttc attattatatac tagaatattt 3120
 ttatggcaag atattttgtgg tcttgcattt acctattaaa ataatgccaac acaccaata 3180
 tgaattttat gatgtacact ttgtgttgg cattaaaaga aaaaaacaca catcctggaa 3240
 gtctgttaatc tgggtttgt tactgttaggt cttcaagtt aagagtgtaa gtggaaaatc 3300
 tggaggagag gataattcc actgtgtggaa atgtgaatag ttaaatgaaa agttatgggt 3360
 atttaatgtt atttactt caaatcctt ggtcactgtg atttcaagca tggtttctt 3420
 ttctccctta tatgacttcc tctgagttgg gcaaaaaga agctgacaca ccgtatgtt 3480
 ttagagtctt ttatctggc agggaaaca aaatcttgc ccagctgaac atgtcttcct 3540
 gagtcagtgc ctgaatctt attttttaaa ttgaatgtt cttaaagggtt aacatttcta 3600
 aagcaatatt aagaaagact ttaaatgtt ttttggaaaga cttacgatgc atgtatacaa 3660
 acgaatagca gataatgatc actagttcac acataaagtc cttttaagga gaaaatctaa 3720
 aatgaaaagt ggataaacag aacatttata agtgcatttgc taatgcctaa gagtgaaaagt 3780
 agttctatttgc acattcctca agatattttaa tatcaactgc attatgtattt atgtctgcattt 3840
 aaatcatttta aaaacggcaa agaatttatac agactatgag gtaccttgc gtgtaggagg 3900
 atgaaagggg agttgatagt ctcataaaaac taatttggct tcaagttca tgaatctgt 3960
 actagaattt aattttcacc ccaataatgt tctatatacg ctttgcataaa gagcaactaa 4020
 taaattaaac ctattcttca aaaaaaaaaa 4049

At
census